

**Checklist for Method 300.0
Ion Chromatography**

- 1) Initial calibration containing a blank and three standards available?
- 2) Correlation coefficient ≥ 0.995 ?
- 3) Standard storage:

Stock standards for all except chlorite = one month stored at 4°C
Chlorite stock = two weeks at 4°C
Daily standards except for nitrite and phosphate = one week
Nitrite and phosphate must be prepared fresh daily
- 4) Retention times recorded on the initial calibration?
- 5) Initial calibration date recorded on the daily analysis reports?
- 6) Daily calibration - Is curve verified to be within 10% of the initial curve prior to sample analysis?
- 7) Response factors verified on sample analysis runs to be within 10% of those on the initial calibration?
- 8) Is the original linear range documented and verified every six months by analyzing a blank and three standards?
- 9) The linear range standards must be within 10% of the initial linear range study.
- 10) Are MDLs calculated every six months?
- 11) Is the calculated MDL greater than the lowest standard or reporting limit?
- 12) Is a Quality Control Sample (independent standard) analyzed at least quarterly?
- 13) Are the results of the QCS within 10% of the true value?

- 14) Is a reagent blank analyzed with each batch (10) samples?
- 15) Are the results of the blank below the MDL?
- 16) Is a Lab Fortified Blank (spiked blank) analyzed with each batch of samples?
- 17) Are the results of the LFB within 10% of the true value?
- 18) Are current control limits compiled and available in the laboratory?
- 19) Is the LFB analyzed in duplicate quarterly?
- 20) Are the results of the duplicate LFB results charted?
- 21) Is an Instrument Performance Check standard (mid-range standard) analyzed immediately following the calibration curve, after every ten samples, and at the end of the run?
- 22) Are the results of the IPC within 10% of the true value?
- 23) Are matrix spikes analyzed with each batch of samples?
- 24) Are matrix spike control limits established by the laboratory?
- 25) Are matrix spike recoveries within 20% of the true value for bromide, chloride, fluoride, nitrate, nitrite, ortho-phosphate, and sulfate?